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UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
07/960.071	10/13/92	DEAN ENGELHARDT, ET AL.	ENZ~5 (D5)(C)

ENZO DIAGNOSTICS, INC.

C/O ENZO BOCHEM, INC.

60 EXECUTIVE BLVD.

FARMINGDALE, NY 11735

FILED NO. CNZ-5 (DSXC)

DOCKETED FOR (2/19/92 BY BL/RCF)

C/O ENZO BIOCHEM, INC.

60 EXECUTIVE BOULEVARD, FARMINGDALE, NY 11735

EXAMINER

ART UNIT PAPER NUMBER

2

DATE MAILED 4 11 (3) 1992

IF NO RESPONSE TO THIS NOTICE IS RECEIVED WITHIN FORTY-FIVE DAYS, A FORMAL REQUIREMENT WILL BE ISSUED

The subject matter of this application appears to:

be "useful in the production or utilization of special nuclear material or atomic energy" as recited in 42 U.S.C. 2182 (Department of Energy (DOE)).

□"have significant utility in the conduct of aeronautical and space activities" as recited in 42 U.S.C. 2457 (National Aeronautics and Space Administration (NASA)).

Accordingly, no patent can issue on this application unless applicant(s) file a statement (under oath or in the form of a declaration as provided by 37 CFR 1.68) setting forth (1) the full facts concerning the circumstances under which the invention was made and conceived and (2) the relationship (if any) of the invention to the performance of any work under any contract or other arrangement with the Agency (ies) noted above. On the reverse side of this form is an example of an acceptable format for this statement. The language appearing in paragraphs III and/or IV of the example must appear if applicant is attempting to establish that no relationship (under item 2 above) exists.

If the invention disclosed in this application was developed under a contract, grant or cooperative agreement between the Agency indicated above and a person, small business or non-profit organization and rights to the invention have been determined by specific reference to 35 U.S.C. 202 in the contract, grant or cooperative agreement, then applicant need not submit the statement described above. Instead, applicant may file a verified statement (under oath or in the form of a declaration, 37 CFR 1.68) setting forth the information required by 35 U.S.C. 202(c)(6).

IF NO STATEMENT HAS BEEN RECEIVED WITHIN FORTY-FIVE DAYS OF THE MAIL DATE INDICATED ABOVE, a formal requirement for statement will then be issued. No provision is made for extension of the statutory thirty-day period for response to the formal requirement and the penalty for failure to file an acceptable and timely statement is abandonment of the application. Therefore, applicants are strongly encouraged to submit a statement at this time in order to avoid the issuance of a formal requirement.

IT IS IMPORTANT TO NOTE that the statement must accurately represent the property rights situation of the claimed invention if and when the application is found allowable. Thus, if during prosecution before the examiner, the claimed invention is so altered or the property rights situation so changed as to impact the accuracy of a statement submitted earlier, a supplemental statement must be filed. Failure to submit such additional information where appropriate may be considered a false representation of material facts and render the patent owner vulnerable to loss of patent rights and other sanctions as set forth in the statutes. The PTO will not review allowed applications for this possibility. The responsibility for complying with the statutes rests with the applicants.

Any questions regarding this requirement should be directed to Licensing and Review at (703) 308-3312.

PLEASE DIRECT ALL COMMUNICATIONS RELATING TO THIS MATTER TO THE ATTENTION OF LICENSING AND REVIEW

ì

EXHIBIT A

Applicants: Dean Engelhardt et al.

Serial No.: 07/954,772

Filed:

September 30, 1992

Title: HYBRIDIZATION ASSAY METHOD

(As Amended)

Group Art Unit: 1807

Examiner: Not Yet Known

Parent Serial No. 07/548,348 Filed on July 2, 1990

November 9, 1992 New York, New York

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Attention:

LICENSING AND REVIEW

COMMUNICATION DIRECTED TO OCTOBER 19, 1992 ATOMIC ENERGY NOTICE

Dear Sirs:

This Communication is directed to the Atomic Energy Notice that was issued on October 19, 1992 (copy attached) in connection with the above-identified application. A response to the October 19, 1992 Notice is due December 3, 1992.

Applicants' undersigned attorney wishes to bring to the attention of Licensing and Review that an Atomic Energy Notice was also issued on July 19, 1990 in connection with the parent application, U.S. Application Serial No. 07/548,348, filed on July 2,

1990.

Enz-5 (D8) (C)

FIRST CLASS CERTIFICATE

I hereby certify that this correspondence is being deposited today with the U.S. Postal Service as first class mail in an envelope addressed to Commissioner of Patents & Trademarks Washington, D.C. 2023

Rourld C. Fedus Reg. No. 32,567

Date

Dean Engelhardt et al. Serial No. 07/954,772

Filed: September 30, 1992

Page 2 (Communication Directed to October 19, 1992 Atomic Energy Notice - November 9, 1992)

On August 21, 1990, Applicants responded to the July 2, 1990 Notice with appropriate declarations signed and dated by all of the named inventors. A copy Applicants' August 21, 1990 response, including a copy of the July 2, 1990 Notice is attached to this Communication as Exhibit A.

It is the understanding of the undersigned, based upon a recent telephone conversation with Licensing and Review, that the submission of a copy of the previous response filed in the parent application (Serial No. 07/548,348) is a sufficient response to the Atomic Energy Notice, and that Applicants need not take any further action therewith.

No fee is due in connection with this Communication. If any fee or fees are due, however, The U.S. Patent and Trademark Office is hereby authorized to charge the amount of any such fee(s) to Deposit Account No. 05-1135, and to credit any overpayment thereto.

Respectfully submitted,

November 9, 1992 Date

Ronald C. Fedus

Registration No. 32,567 Attorney for Applicants

ENZO DIAGNOSTICS, INC. c/o Enzo Biochem, Inc. 60 Executive Boulevard Farmingdale, New York 11735 (212) 856-0876





UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
07/954,772	9/30/92	DEAN, ENGELHARD, ET AL.	ENZ-5
		OCT 2 2 1976	

OCI 53 1115

RONALD C. FEDUS
PATENT COUNSEL
ENZO BIOCHEM, INC.
575 FIFTH AVE. (18TH FF.)
NEW YORK, NY 10017

EXAMINER

ART UNIT | PAPER NUMBER

FILED NO. ENZ S
DOCKETED FOR 12-3-92 BY
60 EXECUTIVE SOULEVARD, FARMINGDALE, NY 11735

DATE MAILED: 10/19/92.

IF NO RESPONSE TO THIS NOTICE IS RECEIVED WITHIN FORTY-FIVE DAYS, A FORMAL REQUIREMENT WILL BE ISSUED

The subject matter of this application appears to:

be "useful in the production or utilization of special nuclear material or atomic energy" as recited in 42 U.S.C. 2182 (Department of Energy (DOE)).

☐"have significant utility in the conduct of aeronautical and space activities" as recited in 42 U.S.C. 2457 (National Aeronautics and Space Administration (NASA)).

Accordingly, no patent can issue on this application unless applicant(s) file a statement (under oath or in the form of a declaration as provided by 37 CFR 1.68) setting forth (1) the full facts concerning the circumstances under which the invention was made and conceived and (2) the relationship (if any) of the invention to the performance of any work under any contract or other arrangement with the Agency (ies) noted above. On the reverse side of this form is an example of an acceptable format for this statement. The language appearing in paragraphs III and/or IV of the example must appear if applicant is attempting to establish that no relationship (under item 2 above) exists.

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Any questions regarding this requirement should be directed to Licensing and Review at (703) 308-3312.

PLEASE DIRECT ALL COMMUNICATIONS RELATING TO THIS MATTER TO THE ATTENTION OF LICENSING AND REVIEW

EXHIBIT B





UNITED STATES ARTMENT OF COMMERCE Patent and Trademark Office RECEIVED

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 AUG 3 1 1000

	FILING DATE	FIRST NAMED APPUCANT	ATTY. DOCKET NO.
SERIAL NUMBER	FIGRODATE		O. I. MOSOFE
07/567.039	08/13/90	DEAN L. ENGELHARDT, ET AL.	Fnz=5 (Div.7)

Serle I. Mosoff, Esq. Enzo Biochem, Inc. 345 Hudson Street New York, NY 10014

EXA	MINER
ARTUNIT	PAPER NUMBER
	2

DATE MAILED:

Aug 28, 1990

IF NO RESPONSE TO THIS NOTICE IS RECEIVED WITHIN FORTY-FIVE DAYS, A FORMAL REQUIREMENT WILL BE ISSUED

The subject matter of this application appears to:

be "useful in the production or utilization of special nuclear material or atomic energy" as recited in 42 U.S.C. 2182 (Department of Energy (DOE)).

□"have significant utility in the conduct of aeronautical and space activities" as recited in 42 U.S.C. 2457 (National Aeronautics and Space Administration (NASA)).

Accordingly, no patent can issue on this application unless applicant(s) file a statement (under oath or in the form of a declaration as provided by 37 CFR 1.68) setting forth (1) the full facts concerning the circumstances under which the invention was made and conceived and (2) the relationship (if any) of the invention to the performance of any work under any contract or other arrangement with the Agency (ies) noted above. On the reverse side of this form is an example of an acceptable format for this statement. The language appearing in paragraphs III and/or IV of the example must appear if applicant is attempting to establish that no relationship (under item 2 above) exists.

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Any questions regarding this requirement should be directed to Licensing and Review at (703) 557-3011.

PLEASE DIRECT ALL COMMUNICATIONS RELATING TO THIS MATTER TO THE ATTENTION OF LICENSING AND REVIEW

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 567,039 Filed: August 13, 1990 Art Unit: Examiner:

Atty. Docket No.: Enz-5 (Div. 7)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing The Same

September 25, 1990 New York, New York

Commissioner of Patents and Trademarks Washington, D.C. 20231

Attention: Special Laws Administration Group

Licensing and Review

COMMUNICATION

Sir:

This is in response to the Official Notice (Form PTOL 456) dated July 19, 1990 (a copy of which is attached hereto). The Notice requires the filing of a declaration by the applicants. Dean L. Engelhardt, Elazar Rabbani, Stanley Kline, Jannis G. Stavrianopoulos and Dollie Kirtikar because the subject matter of the captioned application "appears to be useful in the production or utilization of special nuclear material or atomic energy as recited in 42 U.S.C. 2182 (Department of Energy (DOE))".

Appended are the applicants' declarations fully satisfying the requirements set forth in the Official Notice.

FIRST CLASS CERTIFICATE

I hereby certify that this correspondence is being deposited today with the U.S. Postal Service as Eirst class mail in an envelope addressed to: Conynissioner of Patents & Trademarks Washington,

Serle I. Mc Reg. No. 25 Date

Idsoff Date

Enz-5 (Div. 7)

Respectfully submitted,

Serie Ian Mosoff \Attorney for Applicants Registration No. 25,900

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 567,039

Art Unit:

Filed: August 13, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 7)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing The Same

> September 25, 1990 New York. New York

APPLICANT DEAN L. ENGELHARDT'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

I. Dean L. Engelhardt, hereby declare that:

- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the assignce of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Sept. 19, 1950
Date

Dean L. Engelhardt

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 567,039

Art Unit: Examiner:

Filed: August 13, 1990

Atty. Docket No.: Enz-5 (Div. 7)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing The Same

September 25, 1990 New York, New York

APPLICANT ELAZAR RABBANI'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Elazar Rabbani, hereby declare that:
- I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the assignee of this patent application.
- As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Sept. 19 1996

Elazar Rabbani

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 567,039

Art Unit: Examiner:

Filed: August 13, 1990 Atty. Docket No.: Enz-5 (Div. 7)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing The Same

September 25, 1990 New York, New York

APPLICANT JANNIS G. STAVRIANOPOULOS'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

I, Jannis G. Stavrianopoulos, hereby declare that:

- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the assignee of this patent application.
- As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may Jeopardize the validity of the application or any patent issuing thereon.

9/20/90 Date

Jannis G. Stavrianopovilos

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 567,039 Filed: August 13, 1990 Art Unit:

Examiner:

Atty. Docket No.: Enz-5 (Div. 7)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing The Same

> September 25, 1990 New York, New York

APPLICANT DOLLIE KIRTIKAR'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Dollie Kirtikar, hereby declare that:
- I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the assignee of this patent application.
- As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

9	/20/	19	0		
Date	,			 	

Molh Listikan Dollie Kirtikar

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 567, 039 Filed: August 13, 1990 Art Unit:

Examiner:

Atty. Docket No.: Enz-5 (Div. 7)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing The Same

September 14, 1990 New York, New York

APPLICANT STANLEY KLINE'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 [42 U.S.C. 2182]

- I, Stanley Kline, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the assignee of this patent application.
- As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

Enz-5 (Div. 7)

.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

9	20	90	_
Date			

Stanley C1 KI

RECEIVED

Enz-5 (Div. 7) September 25, 1990 不 First Class Mailing Date Express Mail Label No. AEC Declaration and Form PTOL 456 Serial No. 567,039 Please date stamp and return to addressee. Docket No. APPLICANT: Dean L. Engelhardt, et al. TITLE: Modified Nucleotides, Methods Compositions Containing the Same. ☐ Response to OA☐ Amendment☐ Issue Fee ☑ Other (see below) of Preparing and Utilizing and M Communication ENCLOSED ARE: ☐ Drawings . ☐ Assignment □ Application □ Declaration

EXHIBIT C

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,461

Art Unit:

Filed: May 31, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 6)

Title:

Modified Nucleotides, Methods of Preparing

and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

Commissioner of Patents and Trademarks Washington, D.C. 20231

Attention: Special Laws Administration Group

Licensing and Review

COMMUNICATION

Sir:

This is in response to the Official Notice (Form PTOL 456) dated June 15, 1990 (a copy of which is attached hereto). The Notice requires the filing of a declaration by the applicants, Dean L. Engelhardt, Elazar Rabbani, Stanley Kline, Jannis G. Stavrianopoulos and Dollie Kirtikar because the subject matter of the captioned application "appears to be 'useful in the production or utilization of special nuclear material or atomic energy' as recited in 42 U.S.C. 2182 (Department of Energy (DOE))".

Appended are the applicants' declarations fully satisfying the requirements set forth in the Official Notice.

I hereby certify that this correspondence is being deposited today with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents & Trademarks Washington, D.C. 20231

Serle I. Mosoat Reg. No. 25, 900

Respectfully submitted,

Serle Ian Mosoff Reg. No. 25,900

RECEIVED

JUN 2 0 1990

S. I. MOSOFF



UNITED STATES ARTMENT OF COMMERCI

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY, DOCKET NO.
07/532,461	05/31/90	DEAN L. ENGELHARDT, ET AL.	Enz-5(Div-6)

Serle Ian Mosoff Enzo Biochem, Inc. 345 Hudson Street New York, NY 10014

ARTUNIT PAPER NUMBI	EX	AMINER
ARTUNIT PAPER NUMBI		
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DATEMAILED: June 15, 1990

IF NO RESPONSE TO THIS NOTICE IS RECEIVED WITHIN FORTY-FIVE DAYS, A FORMAL REQUIREMENT WILL BE ISSUED

The subject matter of this application appears to:

be "useful in the production or utilization of special nuclear material or atomic energy" as recited in 42 U.S.C. 2182 (Department of Energy (DOE)).

"have significant utility in the conduct of aeronautical and space activities" as recited in 42 U.S.C. 2457 (National Aeronautics and Space Administration (NASA)).

Accordingly, no patent can issue on this application unless applicant(s) file a statement (under oath or in the form of a declaration as provided by 37 CFR 1.68) setting forth (1) the full facts concerning the circumstances under which the invention was made and conceived and (2) the relationship (if any) of the invention to the performance of any work under any contract or other arrangement with the Agency (ies) noted above. On the reverse side of this form is an example of an acceptable format for this statement. The language appearing in paragraphs III and/or IV of the example must appear if applicant is attempting to establish that no relationship (under item 2 above) exists.

If the invention disclosed in this application was developed under a contract, grant or cooperative agreement between the Agency indicated above and a person, small business or non-profit organization and rights to the invention have been determined by specific reference to 35 U.S.C. 202 in the contract, grant or cooperative agreement, then applicant need not submit the statement described above. Instead, applicant may file a verified statement (under oath or in the form of a declaration, 37 CFR 1.68) setting forth the information required by 35 U.S.C. 202(c)(6).

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Any questions regarding this requirement should be directed to Licensing and Review at (703) 557-3011.

PLEASE DIRECT ALL COMMUNICATIONS RELATING TO THIS MATTER TO THE ATTENTION OF LICENSING AND REVIEW

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,461

Art Unit:

Filed: May 31, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 6)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT DEAN L. ENGELHARDT'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 [42 U.S.C. 2182]

- I, Dean L. Engelhardt, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date 25, 1920

Dean L. Engelhard

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,461 Art Unit:

Filed: May 31, 1990 Examiner:

Atty. Docket No.: Enz-5 (Div. 6)

Title: Modified Nucleotides, Methods of Preparing and

Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT ELAZAR RABBANI'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I. Elazar Rabbani, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

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SUN 25 1990

Date

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,461

Filed: May 31, 1990 Examiner:

Atty. Docket No.: Enz-5 (Div. 6)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

Art Unit:

July 10, 1990 New York, New York

APPLICANT JANNIS G. STAVRIANOPOULOS'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Jannis G. Stavrianopoulos, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

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6/21/90

Date

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,461

Art Unit:

Filed: May 31, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 6)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT DOLLIE KIRTIKAR'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I. Dollie Kirtikar, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

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6/21:70

Date

Mollin Ci, likan Dollie Kirtikar

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,461

Art Unit:

Filed: May 31, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 6)

Title:

THE RESERVE OF THE PROPERTY OF THE PARTY OF

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT STANLEY KLINE'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Stanley Kline, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
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7/15/90	
Date	

Stanley Kline

EXHIBIT D

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 531,953

Art Unit:

Filed: June 1, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 5)

Title:

Modified Nucleotides, Methods of Preparing

and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

Commissioner of Patents and Trademarks Washington, D.C. 20231

Attention: Special Laws Administration Group

Licensing and Review

COMMUNICATION

Sir:

This is in response to the Official Notice (Form PTOL 456) dated June 15, 1990 (a copy of which is attached hereto). The Notice requires the filing of a declaration by the applicants, Dean L. Engelhardt, Elazar Rabbani, Stanley Kline, Jannis G. Stavrianopoulos and Dollie Kirtikar because the subject matter of the captioned application "appears to be 'useful in the production or utilization of special nuclear material or atomic energy' as recited in 42 U.S.C. 2182 (Department of Energy (DOE))".

Appended are the applicants' declarations fully satisfying the requirements set forth in the Official Notice.

FIRST CLASS CERTIFICATE

I hereby certify that this correspondence is being deposited today with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents & Trademarks Washington.

100-1-11

Serle I. Mosoff Reg. No. 25,900 10 () h 9)

Respectfully submitted,

Serle Ian Mosoff Reg. No. 25,900

JUN 1 9 1990



UNITED STATES DEPARTMENT OF COMMERCE

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

S. I. MOSOFF	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
07/531,953	06/01/90	DEAN L. ENGELHARDT, ET AL.Q	Enz-5(Div.5)

Serle I. Mosoff, Corporate Counsel Enzo Biochem, Inc. 345 Hudson Street New York, NY 10014

EXA	MINER
	* * * * * * * * * * * * * * * * * * * *
ART UNIT	PAPER NUMBER
	··· 2

DATE MAILED: Tame

June 15, 1990

IF NO RESPONSE TO THIS NOTICE IS RECEIVED WITHIN FORTY-FIVE DAYS, A FORMAL REQUIREMENT WILL BE ISSUED

The subject matter of this application appears to:

be "useful in the production or utilization of special nuclear material or atomic energy" as recited in 42 U.S.C. 2182 (Department of Energy (DOE)).

□"have significant utility in the conduct of aeronautical and space activities" as recited in 42 U.S.C. 2457 (National Aeronautics and Space Administration (NASA)).

Accordingly, no patent can issue on this application unless applicant(s) file a statement (under oath or in the form of a declaration as provided by 37 CFR 1.68) setting forth (1) the full facts concerning the circumstances under which the invention was made and conceived and (2) the relationship (if any) of the invention to the performance of any work under any contract or other arrangement with the Agency (ies) noted above. On the reverse side of this form is an example of an acceptable format for this statement. The language appearing in paragraphs III and/or IV of the example must appear if applicant is attempting to establish that no relationship (under item 2 above) exists.

If the invention disclosed in this application was developed under a contract, grant or cooperative agreement between the Agency indicated above and a person, small business or non-profit organization and rights to the invention have been determined by specific reference to 35 U.S.C. 202 in the contract, grant or cooperative agreement, then applicant need not submit the statement described above. Instead, applicant may file a verified statement (under oath or in the form of a declaration, 37 CFR 1.68) setting forth the information required by 35 U.S.C. 202(c)(6).

IF NO STATEMENT HAS BEEN RECEIVED WITHIN FORTY-FIVE DAYS OF THE MAIL DATE INDICATED ABOVE, a formal requirement for statement will then be issued. No provision is made for extension of the statutory thirty-day period for response to the formal requirement and the penalty for failure to file an acceptable and timely statement is abandonment of the application. Therefore, applicants are strongly encouraged to submit a statement at this time in order to avoid the issuance of a formal requirement.

IT IS IMPORTANT TO NOTE that the statement must accurately represent the property rights situation of the claimed invention if and when the application is found allowable. Thus, if during prosecution before the examiner, the claimed invention is so altered or the property rights situation so changed as to impact the accuracy of a statement submitted earlier, a supplemental statement must be filed. Failure to submit such additional information where appropriate may be considered a false representation of material facts and render the patent owner vulnerable to loss of patent rights and other sanctions as set forth in the statutes. The PTO will not review allowed applications for this possibility. The responsibility for complying with the statutes rests with the applicants.

Any questions regarding this requirement should be directed to Licensing and Review at (703) 557-3011.

PLEASE DIRECT ALL COMMUNICATIONS RELATING TO THIS MATTER TO THE ATTENTION OF LICENSING AND REVIEW

Applicant(s): Dean L. Engelhardt, et al.

Art Unit: Serial No.: 531.953

Filed: June 1, 1990 Examiner:

Atty. Docket No.: Enz-5 (Div. 5)

Modified Nucleotides, Methods of Preparing and Title:

Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT DEAN L. ENGELHARDT'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

I, Dean L. Engelhardt, hereby declare that:

1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed

2. I was, at the time of the filing of the captioned appl WWW the employed by Enzo Biochem, Inc., the assignee of this patent to Do with application.

3. As ---2. I was, at the time of the filing of the captioned application

- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

Enz-5 (Div. 5)

1

benefit of the United States Atomic Energy Commission, or its the United States successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Jane 21) 1580

Dean L. Engelhæidt

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE CONTROL OF FRANCE OF FRANCE

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 531.953

Art Unit:

Filed: June 1, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 5)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

> July 10, 1990 New York, New York

APPLICANT ELAZAR RABBANI'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Elazar Rabbani, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- employed by application. 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent
 - 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
 - 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
 - 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

Enz-5 (Div. 5)

1

benefit of the United States Atomic Energy Commission, for its in United States successors, the United States Energy Research and Development Administration or the United States Department of Energy.

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SUN 25 1956

Date

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 531,953

Art Unit:

Filed: June 1, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 5)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT DOLLIE KIRTIKAR'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Dollie Kirtikar, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

Enz-5 (Div. 5)

1

Oktober to DOE letter benefit of the United States Atomic Energy Commission, or its the United States Energy Research and Development Administration or the United States Department of Energy.

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6/21/90

Date

Molla Firbikan

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 531,953

Art Unit:

Filed: June 1, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 5)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT JANNIS G. STAVRIANOPOULOS'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

I, Jannis G. Stavrianopoulos, hereby declare that:

1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.

2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.

3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.

- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

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benefit of the United States Atomic Energy Commission, or its a United States successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date

6/21/90

Jannis G. Stavrianopoulos

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 531,953

Art Unit:

Filed: June 1, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 5)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT STANLEY KLINE'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Stanley Kline, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

Enz-5 (Div. 5)

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benefit of the United States Atomic Energy Commission, or its declared States successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

7/6/96

Stanley Kline

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S.I. MOSOFF SIN T

Please date stamp and retur	n to addressee.
APPLICANT Dean L. Engelhardt, et al.	Express Mail Label No.
TITLE: Modified Nucleotides, Methods of Preparing and Utilizing and Composition	of KI First Class Mailing Date ons July 10, 1990
Containing the Same.	RECEIVED
☐ Response to OA ☐ Application ☐ Declaration ☐ Issue Fee ☐ Drawings ☐ Other (see below)	JUL 131990
Assignment & Other (see Below)	LICENSING & REVIEW
Communication AEC Declaration and Form PTOL 45 AEC Declaration ACC AEC Declaration ACC	6 Serial No. 531,953 Docket No. Enz-5 D.5

EXHIBIT E

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,704 Art Unit:

Filed: June 4, 1990 Examiner:

Atty. Docket No.: Enz-5 (Div. 4)

Title: Modified Nucleotides, Methods of Preparing

and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

Commissioner of Patents and Trademarks Washington, D.C. 20231

Attention: Special Laws Administration Group

Licensing and Review

COMMUNICATION

Sir:

This is in response to the Official Notice (Form PTOL 456) dated June 15, 1990 (a copy of which is attached hereto). The Notice requires the filing of a declaration by the applicants, Dean L. Engelhardt, Elazar Rabbani, Stanley Kline, Jannis G. Stavrianopoulos and Dollie Kirtikar because the subject matter of the captioned application "appears to be 'useful in the production or utilization of special nuclear material or atomic energy' as recited in 42 U.S.C. 2182 (Department of Energy (DOE))".

Appended are the applicants' declarations fully satisfying the requirements set forth in the Official Notice.

FIRST CLASS CERTIFICATE

I hereby certify that this correspondence is being deposited today with the U.S. Postal Service as first class mail in an envelone addressed to: Commissioner of Patents & Trademarks Washington, D.C. 2023

Serle I. Mosoff Reg. No. 25,900

Date

Respectfully submitted,

Serle Ian Mosoff Reg. No. 25,900

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UNITED STATES DE ARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

S.I. MOSOFF

SERIAL NUMBER FILING DATE FIRST NAMED APPLICANT ATTY. DOCKET NO.

07/532,704 06/04/90 DEAN L. ENGELHARDT, ET AL. Enz-5 (Div.4)

Serle I. Mosoff Corporate Counsel Enzo Biochem, Inc. 345 Hudson Street New York, NY 10014

EXAMINER		
ARTUNIT	PAPER NUMBER	
50.5		
9	2	

DATE MAILED:

June 15, 1990

IF NO RESPONSE TO THIS NOTICE IS RECEIVED WITHIN FORTY-FIVE DAYS, A FORMAL REQUIREMENT WILL BE ISSUED

The subject matter of this application appears to:

be "useful in the production or utilization of special nuclear material or atomic energy" as recited in 42 U.S.C. 2182 (Department of Energy (DOE)).

□"have significant utility in the conduct of aeronautical and space activities" as recited in 42 U.S.C. 2457 (National Aeronautics and Space Administration (NASA)).

Accordingly, no patent can issue on this application unless applicant(s) file a statement (under oath or in the form of a declaration as provided by 37 CFR 1.68) setting forth (1) the full facts concerning the circumstances under which the invention was made and conceived and (2) the relationship (if any) of the invention to the performance of any work under any contract or other arrangement with the Agency (ies) noted above. On the reverse side of this form is an example of an acceptable format for this statement. The language appearing in paragraphs III and/or IV of the example must appear if applicant is attempting to establish that no relationship (under item 2 above) exists.

If the invention disclosed in this application was developed under a contract, grant or cooperative agreement between the Agency indicated above and a person, small business or non-profit organization and rights to the invention have been determined by specific reference to 35 U.S.C. 202 in the contract, grant or cooperative agreement, then applicant need not submit the statement described above. Instead, applicant may file a verified statement (under oath or in the form of a declaration, 37 CFR 1.68) setting forth the information required by 35 U.S.C. 202(c)(6).

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Any questions regarding this requirement should be directed to Licensing and Review at (703) 557-3011.

PLEASE DIRECT ALL COMMUNICATIONS RELATING TO THIS MATTER TO THE ATTENTION OF LICENSING AND REVIEW

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,704

Art Unit:

Filed: June 4, 1990

Examiner:

Attv. Docket No.: Enz-5 (Div. 4)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT DEAN L. ENGELHARDT'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Dean L. Engelhardt, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

June 21, 1570

New Sufelhard Dean L. Engelhardt

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532.704

Art Unit:

Filed: June 4, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 4)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT ELAZAR RABBANI'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Elazar Rabbani, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SUN 25 1910

Date

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,704

Art Unit:

Filed: June 4, 1990

Examiner:

Atty. Docket No.: Enz-5 (Div. 4)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

> July 10, 1990 New York, New York

APPLICANT DOLLIE KIRTIKAR'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Dollie Kirtikar, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date

Molhi Kilikar Dollie Kirtikar

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,704

Filed: June 4, 1990

Art Unit: Examiner:

Atty. Docket No.: Enz-5 (Div. 4)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT JANNIS G. STAVRIANOPOULOS'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Jannis G. Stavrianopoulos, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

6/21/90 Date

Applicant(s): Dean L. Engelhardt, et al.

Serial No.: 532,704 Art Unit: Filed: June 4, 1990 Examiner:

Atty. Docket No.: Enz-5 (Div. 4)

Title:

Modified Nucleotides, Methods of Preparing and Utilizing and Compositions Containing the Same

July 10, 1990 New York, New York

APPLICANT STANLEY KLINE'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Stanley Kline, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application employed by Enzo Biochem, Inc., the assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York, NY.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the

benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

7/6/91	
Date /	

Stanley Kline

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TITLE: Modified N	ucleotides, Methods	f 図First Class Mailing Date ns July 10, 1990
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☐ Application ☐ Declaration ☐ Drawings	☐ Amendment ☐ Issue Fee ☑ Other (see below)	JUL 1 3 1950
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AEC Declarat	ion and Form PTOL 450	Serial No. Enz-5 D.4
		Docket No.

Applicant(s): Engelhardt et al.

Serial No.: 07/960,071 Art Unit: 1812

Filed: October 13 1992 Examiner: Not Yet Known

Atty. Docket No.: ENZ-5 (D5)(C)

Title: SUGAR MOIETY LABELED NUCLEOTIDES

APPLICANT DEAN ENGELHARDT'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Dean Engelhardt, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the predecessor assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York City.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.



Applicant Dean Egelhardt Serial No. 07/960,071 Filed: October 13 1992

Atomic Energy Declaration - Page 2

I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dean Engelhardt

Applicant(s): Engelhardt et al.

Serial No.: 07/960,071 Art Unit: 1812

Filed: October 13, 1992 Examiner: Not Yet Known

Atty. Docket No.: ENZ-5 (D5)(C)

Title: SUGAR MOIETY LABELED NUCLEOTIDES

APPLICANT ELAZAR RABBANI'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Elazar Rabbani, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the predecessor assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York City.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.



Applicant Elazar Habbani Serial No. 07/960,071 Filed: October 13, 1992

Atomic Energy Declaration - Page 2

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

APR 22 1993

(Date)

Elazar Rahhani

Applicant(s): Engelhardt et al.

07/960.071 Serial No.: **Art Unit: 1812**

Examiner: Not Yet Known Filed: October 13, 1992

Atty. Docket No.: ENZ-5 (D5)(C)

SUGAR MOIETY LABELED NUCLEOTIDES Title:

APPLICANT STANLEY KLINE'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Stanley Kline, hereby declare that:
- I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- I was, at the time of the filing of the captioned 2. application, employed by Enzo Biochem, Inc., the predecessor assignee of this patent application.
- As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York City.
- The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.



Applicant Stanley Kline Serial No. 07/960,071 Filed: October 13 1992

Atomic Energy Declaration - Page 2

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

<u> 頃から3</u> (Date)

Stanley Kline

Applicant(s): Engelhardt et al.

Serial No.: 07/960,071 Art Unit: 1812

Filed: October 13, 1992 Examiner: Not Yet Known

Atty. Docket No.: ENZ-5 (D5)(C)

Title: SUGAR MOIETY LABELED NUCLEOTIDES

APPLICANT JANNIS G. STAVRIANOPOULOS' DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Jannis G. Stavrianopoulos, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the predecessor assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York City.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.



Applicant Jannis G. Stavrianopoulos Serial No. 07/960,071

Filed: October 13 1992

Atomic Energy Declaration - Page 2

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

(Date)

Jannis G. Stavrianopoulos

Applicant(s): Engelhardt et al.

Serial No.: 07/960.071 Art Unit: 1812

Filed: October 13, 1992 Examiner: Not Yet Known

Atty. Docket No.: ENZ-5 (D5)(C)

Title: SUGAR MOIETY LABELED NUCLEOTIDES

APPLICANT DOLLIE KIRTIKAR'S DECLARATION UNDER SECTION 152 OF THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2182)

- I, Dollie Kirtikar, hereby declare that:
- 1. I am the applicant named in the above-identified patent application and an inventor of the composition and methods disclosed and claimed therein.
- 2. I was, at the time of the filing of the captioned application, employed by Enzo Biochem, Inc., the predecessor assignee of this patent application.
- 3. As part of my work for Enzo Biochem, Inc., I have carried out research activities directed toward radioactive labeling of diagnostic and therapeutic agents that can be used in medical diagnosis and treatment.
- 4. I conceived of and made the invention, disclosed and claimed in this patent application, in the course of carrying out such research activities at Enzo Biochem facilities in New York City.
- 5. The invention described and claimed in this patent application was not made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the benefit of the United States Atomic Energy Commission, or its successors, the United States Energy Research and Development Administration or the United States Department of Energy.



Applicant Dollie Kirtikar Serial No. 07/960,071 Filed: October 13, 1992

Atomic Energy Declaration - Page 2

6. I declare further that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

4/22/93		Sollin Kistikan
(Date)		Dollie Kirtikar